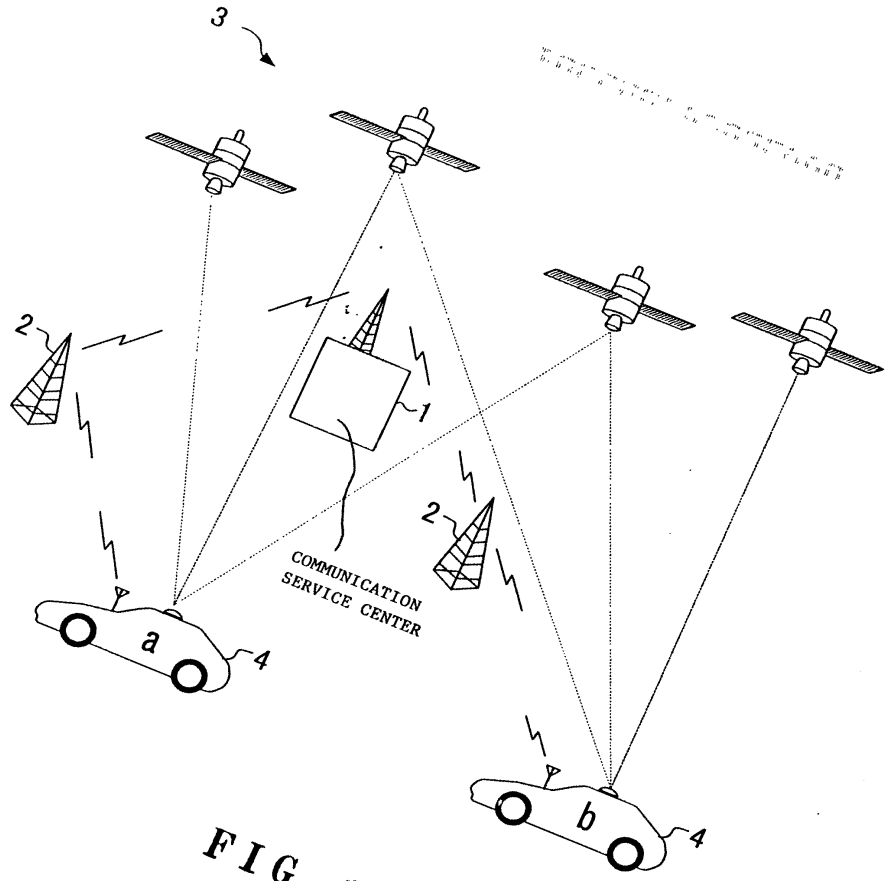

FIG. 1

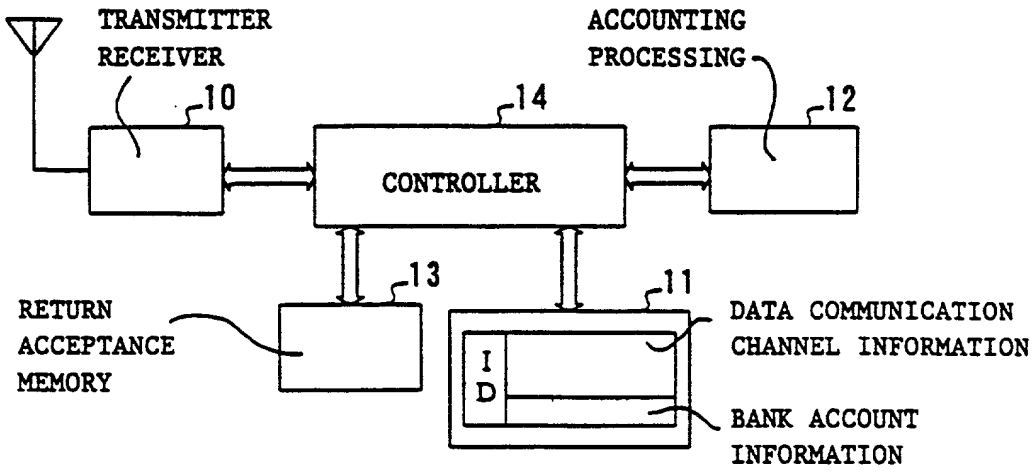
TRANSMITTER
RECEIVER
10
14
CONTROLLER
ACCOUNTING
PROCESSING
12
13
RETURN
ACCEPTANCE
MEMORY
11
I
D
DATA COMMUNICATION
CHANNEL INFORMATION
BANK ACCOUNT
INFORMATION

FIG. 2

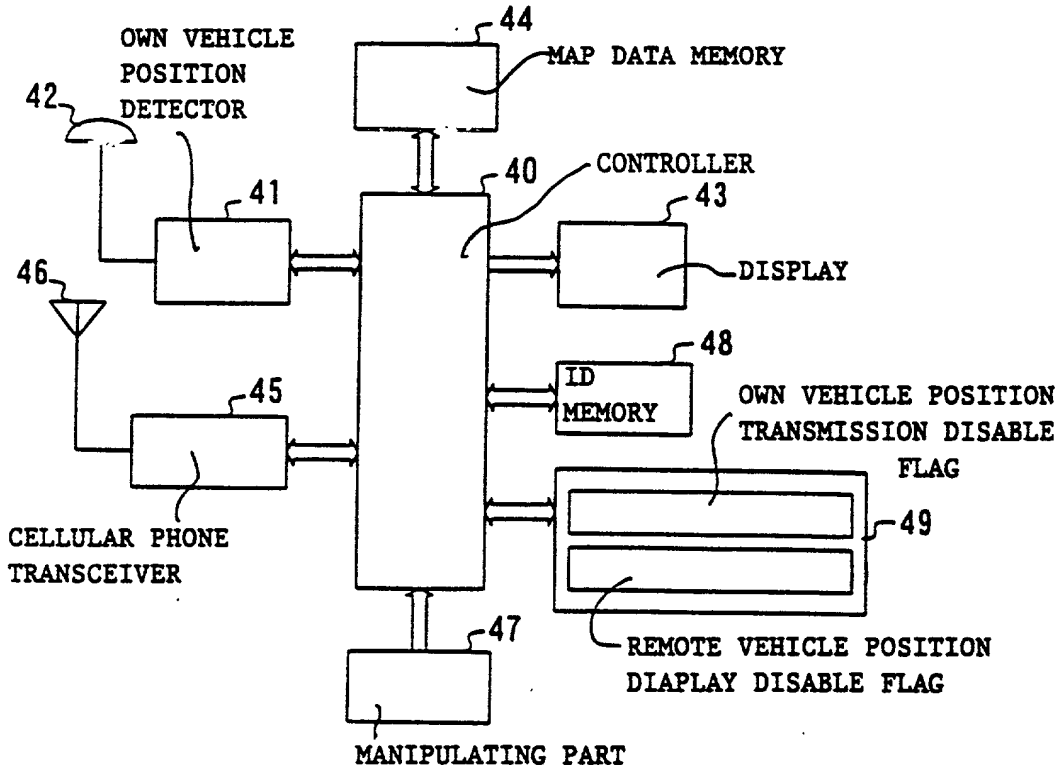
OWN VEHICLE
POSITION
DETECTOR
42
44
MAP DATA MEMORY
41
40
CONTROLLER
43
DISPLAY
46
48
ID
MEMORY
45
OWN VEHICLE POSITION
TRANSMISSION DISABLE
FLAG
49
CELLULAR PHONE
TRANSCEIVER
47
REMOTE VEHICLE POSITION
DIAPLAY DISABLE FLAG
MANIPULATING PART

FIG. 3

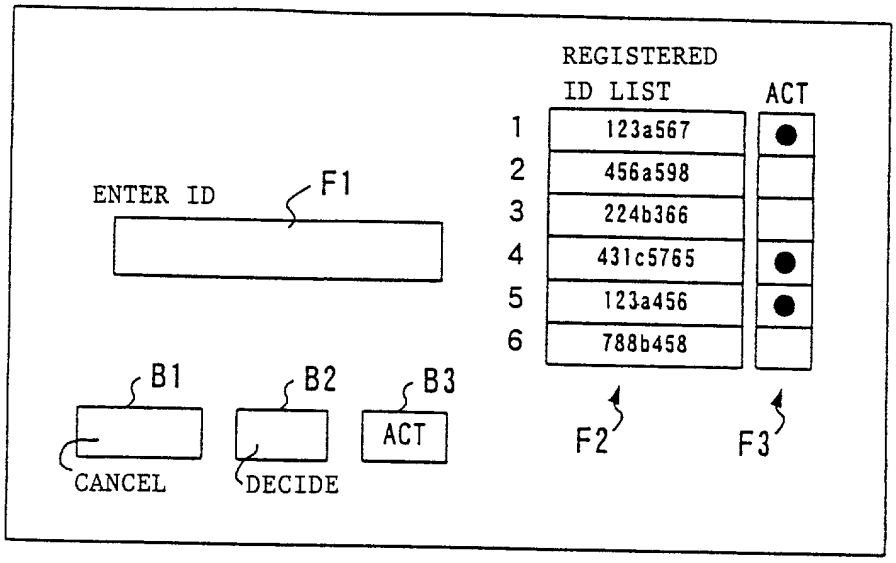
REGISTERED
ID LIST
ACT
1
123a567
2
456a598
3
224b366
4
431c5765
5
123a456
6
788b458
ENTER ID
F1
B1
B2
B3
ACT
CANCEL
DECIDE
F2
F3

FIG. 4

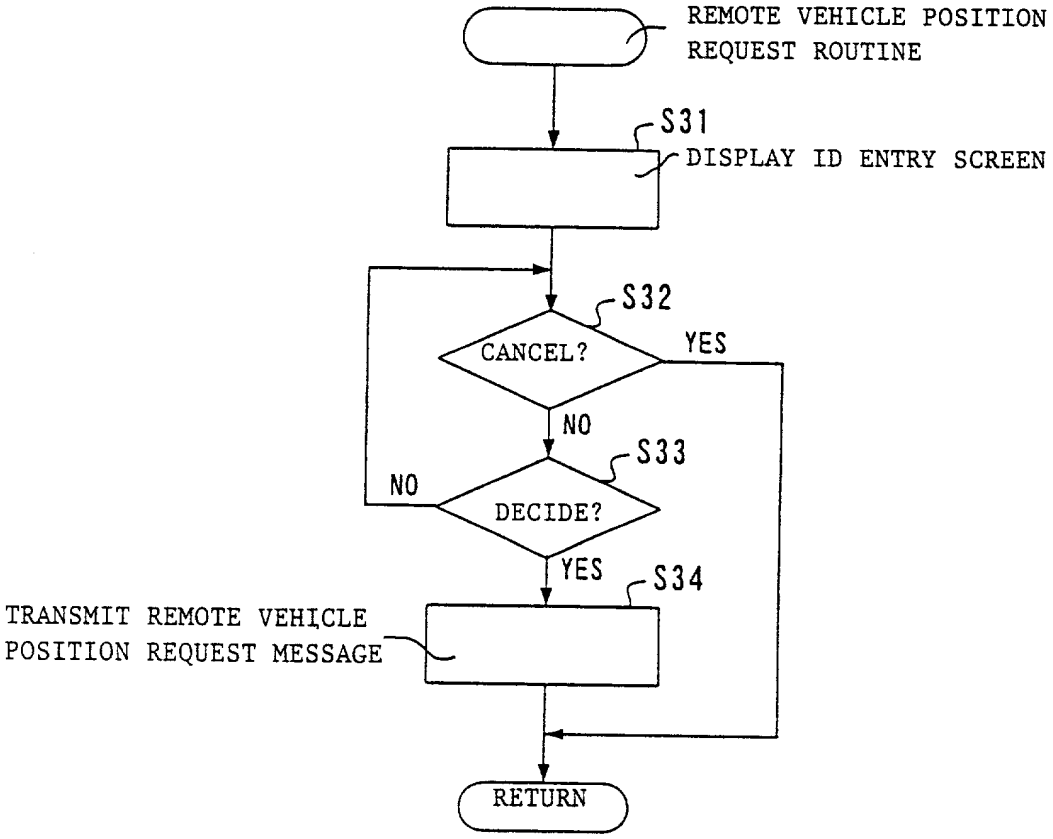
REMOTE VEHICLE POSITION
REQUEST ROUTINE
S31
DISPLAY ID ENTRY SCREEN
S32
CANCEL?
YES
NO
S33
NO
DECIDE?
YES
S34
TRANSMIT REMOTE VEHICLE
POSITION REQUEST MESSAGE
RETURN

FIG. 5

REMOTE VEHICLE POSITION REQUEST MESSAGE

OPR	REQUESTING VEHICLE ID	REQUESTED VEHICLE ID

OPR: REMOTE VEHICLE POSITION REQUEST CODE

FIG. 6

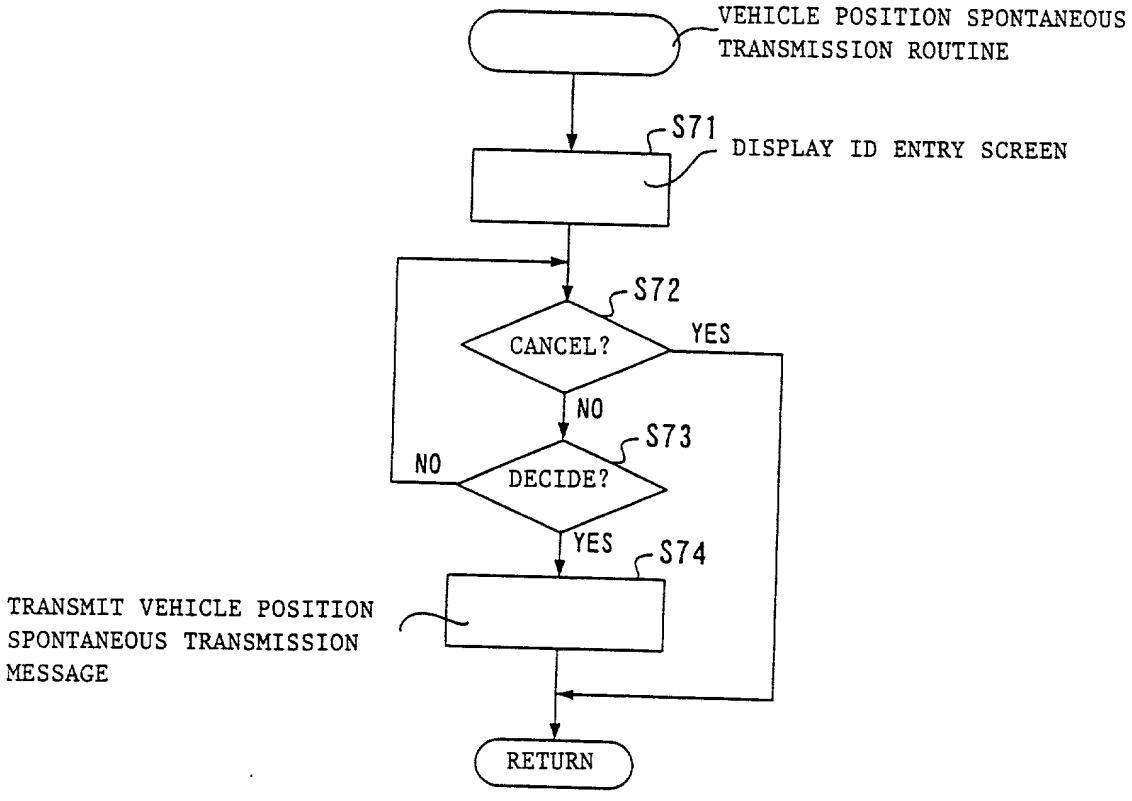

FIG. 7

VEHICLE POSITION SPONTANEOUS TRANSMISSION MESSAGE

CPT	ORIGINATING VEHICLE ID	DESTINATION VEHICLE ID	VEHICLE POSITION INFORMATION

CPT: VEHICLE POSITION SPONTANEOUS TRANSMISSION CODE

FIG. 8

TOE280 "h9092660

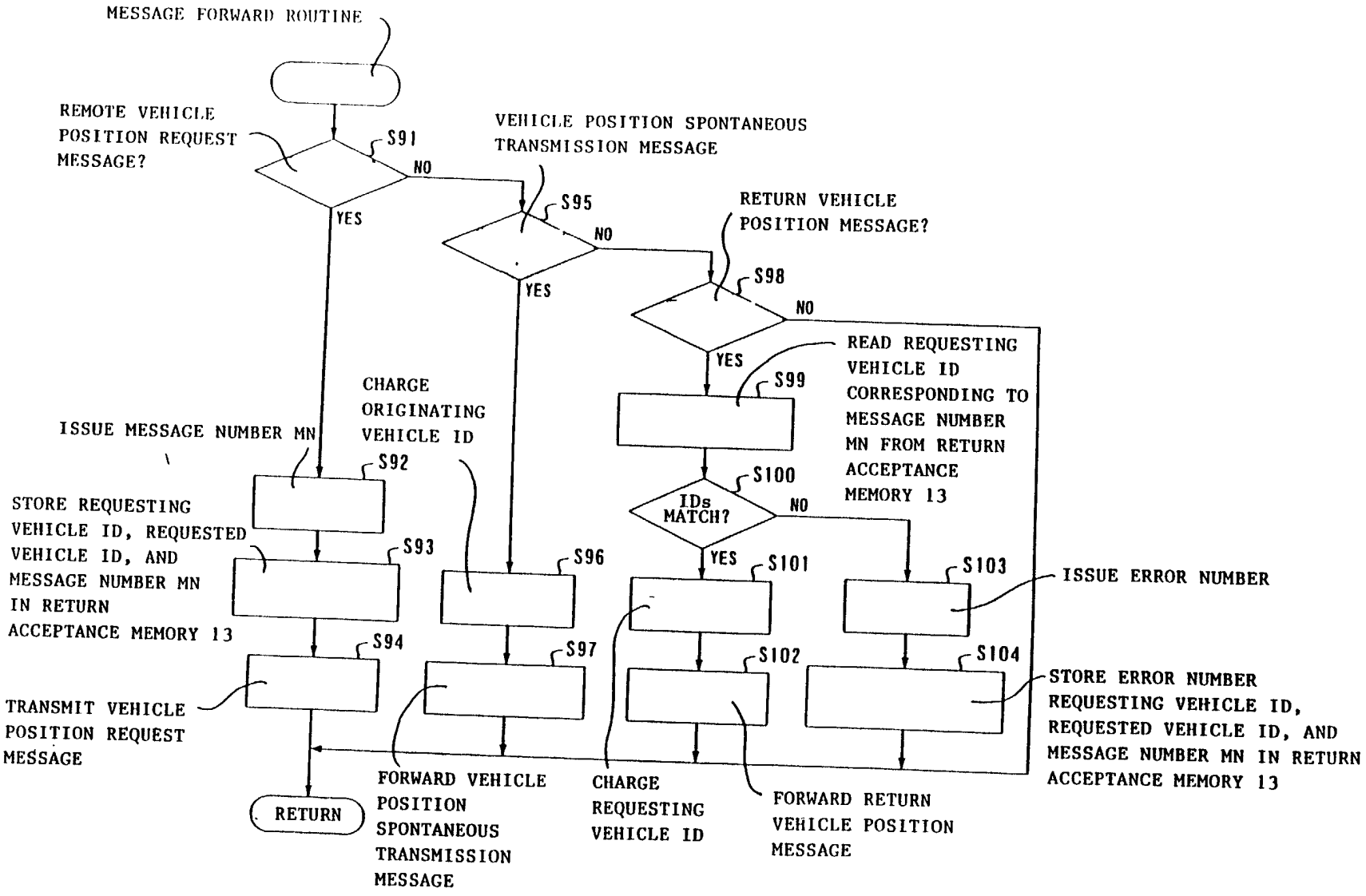

FIG. 9

VEHICLE POSITION REQUEST MESSAGE

CPR	REQUESTING VEHICLE ID	REQUESTED VIHICLE ID	MESSAGE NUMBER

CPR: VEHICLE POSITION REQUEST CODE

FIG. 10

RETURN VEHICLE POSITION MESSAGE

RCP	REQUESTING VEHICLE ID	REQUESTED VEHICLE ID	MESSAGE NUMBER MN	VEHICLE POSITION INFORMATION

RCP: RETURN VEHICLE POSITION CODE

FIG. 11

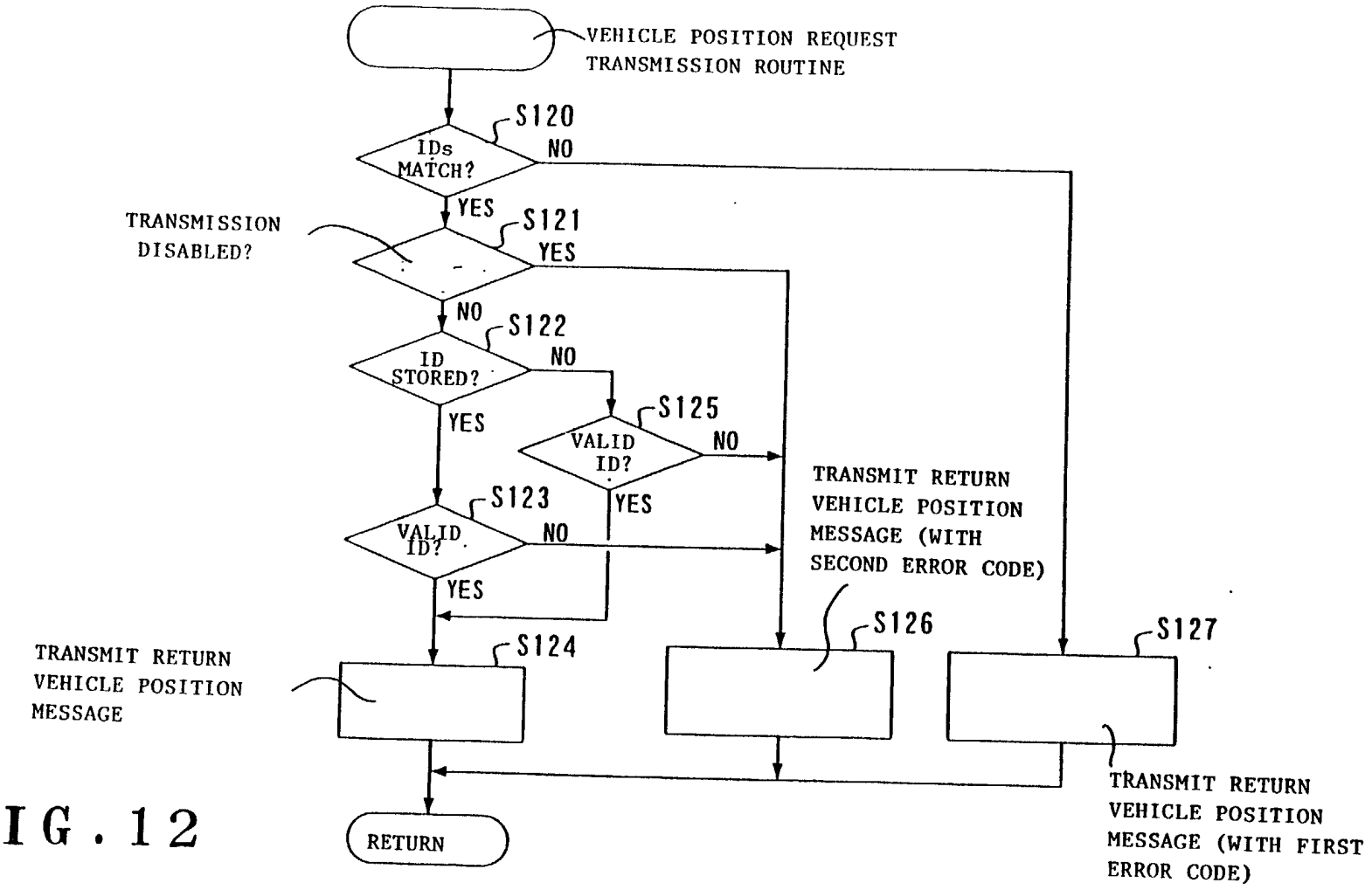
VEHICLE POSITION REQUEST TRANSMISSION ROUTINE
S120
IDs MATCH?
NO
YES
TRANSMISSION DISABLED?
S121
YES
NO
S122
ID STORED?
NO
YES
S125
VALID ID?
NO
YES
S123
VALID ID?
NO
YES
TRANSMIT RETURN VEHICLE POSITION MESSAGE (WITH SECOND ERROR CODE)
S126
S127
TRANSMIT RETURN VEHICLE POSITION MESSAGE
S124
TRANSMIT RETURN VEHICLE POSITION MESSAGE (WITH FIRST ERROR CODE)
RETURN

FIG. 12

RETURN VEHICLE POSITION MESSAGE	RCP	REQUESTING VEHICLE ID	REQUESTED VEHICLE ID	MESSAGE NUMBER MN	ERR1

RCP: RETURN VEHICLE POSITION CODE

ERR1: FIRST ERROR CODE

FIG. 13

RETURN VEHICLE POSITION MESSAGE	RCP	REQUESTING VEHICLE ID	REQUESTED VEHICLE ID	MESSAGE NUMBER MN	ERR2

RCP: RETURN VEHICLE POSITION CODE

ERR2: SECOND ERROR CODE

FIG. 14

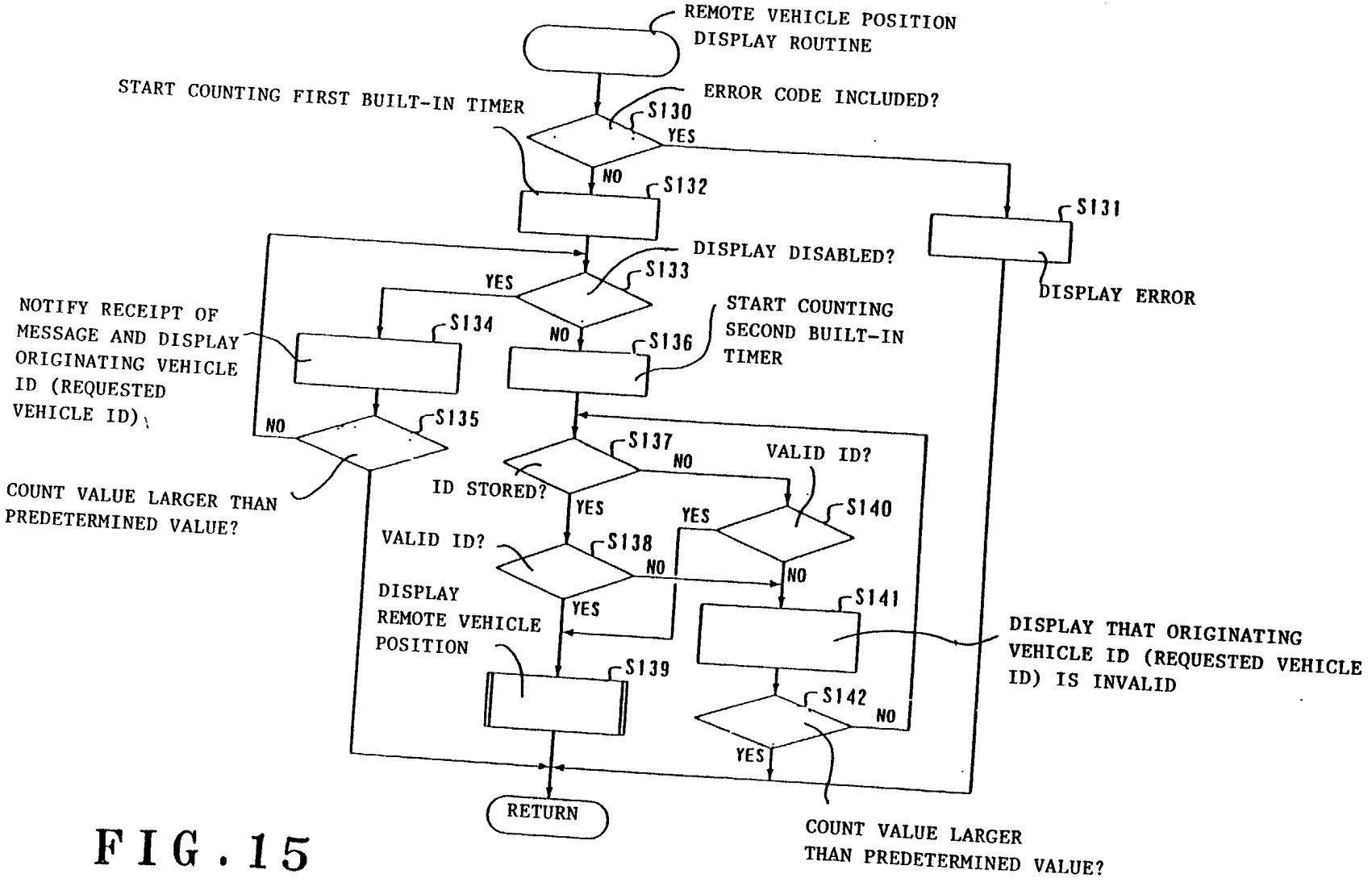
REMOTE VEHICLE POSITION DISPLAY ROUTINE
START COUNTING FIRST BUILT-IN TIMER
ERROR CODE INCLUDED?
S130
YES
NO
S132
S131
DISPLAY ERROR
DISPLAY DISABLED?
S133
YES
NOTIFY RECEIPT OF MESSAGE AND DISPLAY ORIGINATING VEHICLE ID (REQUESTED VEHICLE ID)
S134
NO
S136
START COUNTING SECOND BUILT-IN TIMER
NO
S135
COUNT VALUE LARGER THAN PREDETERMINED VALUE?
S137
NO
VALID ID?
ID STORED?
YES
YES
S140
VALID ID?
S138
NO
NO
DISPLAY REMOTE VEHICLE POSITION
YES
S141
DISPLAY THAT ORIGINATING VEHICLE ID (REQUESTED VEHICLE ID) IS INVALID
S139
S142
NO
YES
RETURN
COUNT VALUE LARGER THAN PREDETERMINED VALUE?

FIG. 15

(REMOTE VEHICLE POSITION DISPLAY MODE)

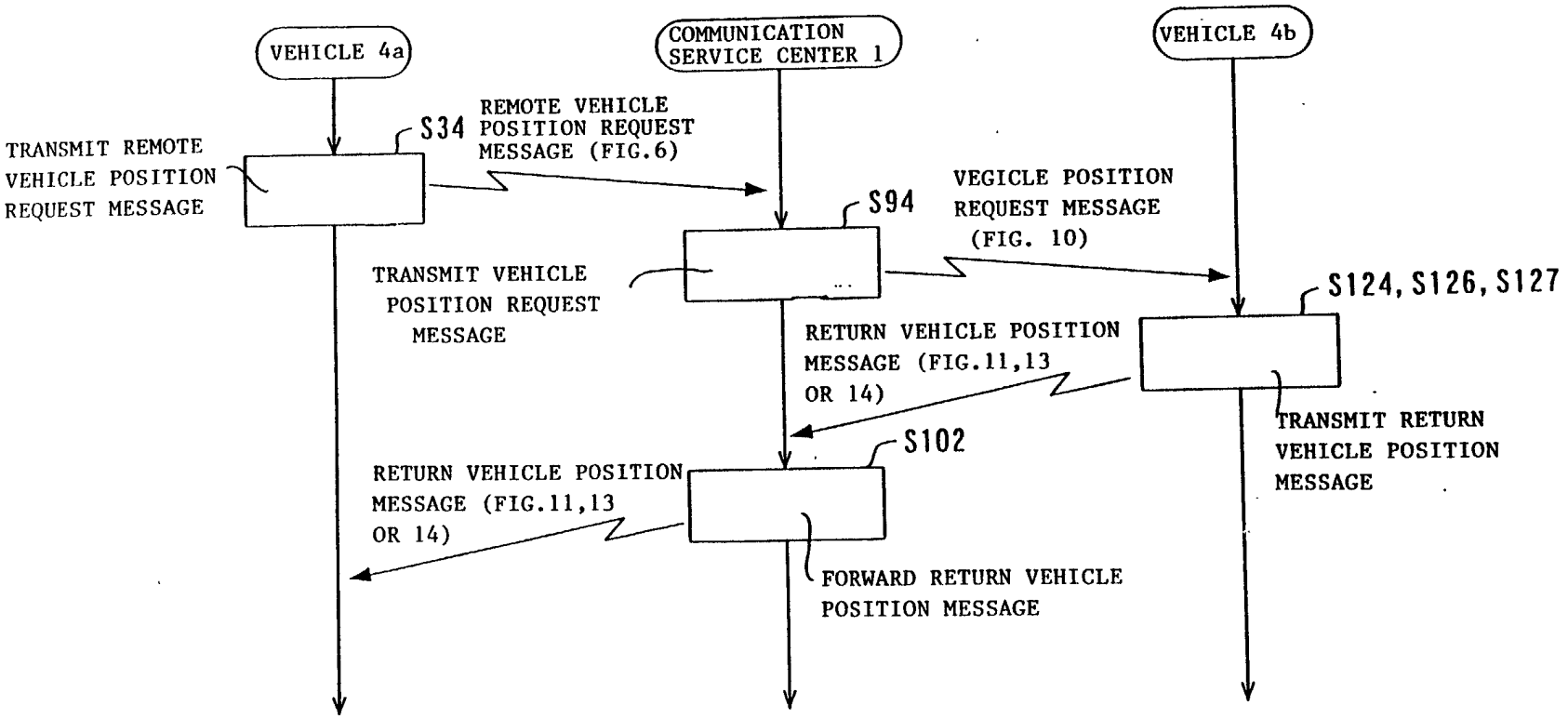

FIG. 16

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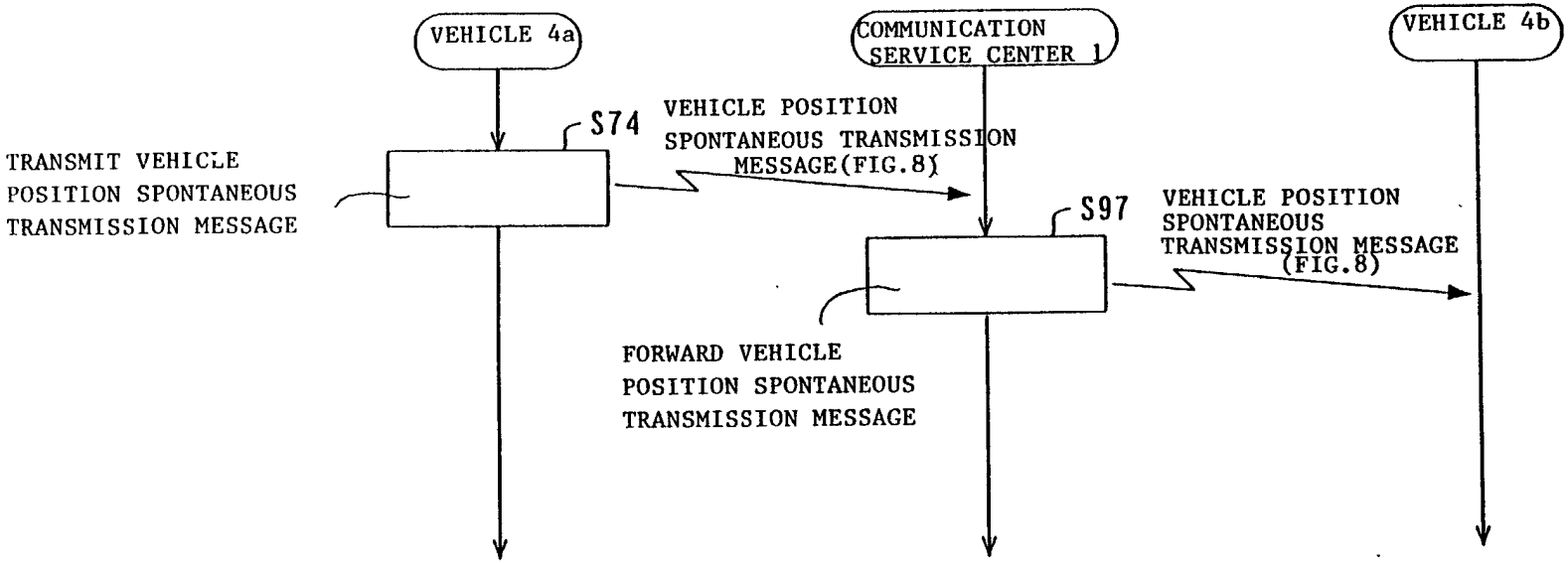

FIG. 17